

\* \* \* \* \* STN Columbus \* \* \* \* \*

FILE 'HOME' ENTERED AT 08:48:06 ON 04 NOV 1997

=> fil .bec

COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
0.26	0.26

FILES 'MEDLINE, SCISEARCH, LIFESCI, BIOTECHDS, BIOSIS, EMBASE, HCAPLUS, NTIS, WPIDS' ENTERED AT 08:48:18 ON 04 NOV 1997

ALL COPYRIGHTS AND RESTRICTIONS APPLY. SEE HELP USAGETERMS FOR DETAILS.

9 FILES IN THE FILE LIST

=> s phosphatidic acid phosphatase# or phosphatidate phosphohydrolase#  
FILE 'MEDLINE'

4300 PHOSPHATIDIC  
814556 ACID  
72271 PHOSPHATASE#  
63 PHOSPHATIDIC ACID PHOSPHATASE#  
(PHOSPHATIDIC(W)ACID(W)PHOSPHATASE#)  
777 PHOSPHATIDATE  
3796 PHOSPHOHYDROLASE#  
278 PHOSPHATIDATE PHOSPHOHYDROLASE#  
(PHOSPHATIDATE(W)PHOSPHOHYDROLASE#)  
L1 341 PHOSPHATIDIC ACID PHOSPHATASE# OR PHOSPHATIDATE PHOSPHOHYDROLASE#

FILE 'SCISEARCH'

2299 PHOSPHATIDIC  
566436 ACID  
37624 PHOSPHATASE#  
58 PHOSPHATIDIC ACID PHOSPHATASE#  
(PHOSPHATIDIC(W)ACID(W)PHOSPHATASE#)  
617 PHOSPHATIDATE  
1089 PHOSPHOHYDROLASE#  
319 PHOSPHATIDATE PHOSPHOHYDROLASE#  
(PHOSPHATIDATE(W)PHOSPHOHYDROLASE#)  
L2 375 PHOSPHATIDIC ACID PHOSPHATASE# OR PHOSPHATIDATE PHOSPHOHYDROLASE#

FILE 'LIFESCI'

874 "PHOSPHATIDIC"  
179504 "ACID"  
12994 PHOSPHATASE#  
16 PHOSPHATIDIC ACID PHOSPHATASE#  
( "PHOSPHATIDIC"(W)"ACID"(W)PHOSPHATASE#)  
188 "PHOSPHATIDATE"  
494 PHOSPHOHYDROLASE#  
57 PHOSPHATIDATE PHOSPHOHYDROLASE#  
( "PHOSPHATIDATE"(W)PHOSPHOHYDROLASE#)  
L3 73 PHOSPHATIDIC ACID PHOSPHATASE# OR PHOSPHATIDATE PHOSPHOHYDROLASE#

FILE 'BIOTECHDS'

59 PHOSPHATIDIC  
60794 ACID  
1961 PHOSPHATASE#  
0 PHOSPHATIDIC ACID PHOSPHATASE#  
(PHOSPHATIDIC(W)ACID(W)PHOSPHATASE#)  
6 PHOSPHATIDATE  
14 PHOSPHOHYDROLASE#

0 PHOSPHATIDATE PHOSPHOHYDROLASE#  
 (PHOSPHATIDATE (W) PHOSPHOHYDROLASE#)  
 L4 0 PHOSPHATIDIC ACID PHOSPHATASE# OR PHOSPHATIDATE PHOSPHOHYD  
 ROLASE#

FILE 'BIOSIS'

4373 PHOSPHATIDIC  
 837109 ACID  
 79301 PHOSPHATASE#  
 123 PHOSPHATIDIC ACID PHOSPHATASE#  
 (PHOSPHATIDIC (W) ACID (W) PHOSPHATASE#)  
 894 PHOSPHATIDATE  
 1863 PHOSPHOHYDROLASE#  
 313 PHOSPHATIDATE PHOSPHOHYDROLASE#  
 (PHOSPHATIDATE (W) PHOSPHOHYDROLASE#)  
 L5 436 PHOSPHATIDIC ACID PHOSPHATASE# OR PHOSPHATIDATE PHOSPHOHYD  
 ROLASE#

FILE 'EMBASE'

3055 "PHOSPHATIDIC"  
 877687 "ACID"  
 50788 PHOSPHATASE#  
 92 PHOSPHATIDIC ACID PHOSPHATASE#  
 ("PHOSPHATIDIC" (W) "ACID" (W) PHOSPHATASE#)  
 706 "PHOSPHATIDATE"  
 1521 PHOSPHOHYDROLASE#  
 259 PHOSPHATIDATE PHOSPHOHYDROLASE#  
 ("PHOSPHATIDATE" (W) PHOSPHOHYDROLASE#)  
 L6 338 PHOSPHATIDIC ACID PHOSPHATASE# OR PHOSPHATIDATE PHOSPHOHYD  
 ROLASE#

FILE 'HCAPLUS'

7770 PHOSPHATIDIC  
 2133903 ACID  
 71119 PHOSPHATASE#  
 119 PHOSPHATIDIC ACID PHOSPHATASE#  
 (PHOSPHATIDIC (W) ACID (W) PHOSPHATASE#)  
 1434 PHOSPHATIDATE  
 2031 PHOSPHOHYDROLASE#  
 365 PHOSPHATIDATE PHOSPHOHYDROLASE#  
 (PHOSPHATIDATE (W) PHOSPHOHYDROLASE#)  
 L7 483 PHOSPHATIDIC ACID PHOSPHATASE# OR PHOSPHATIDATE PHOSPHOHYD  
 ROLASE#

FILE 'NTIS'

21 PHOSPHATIDIC  
 40065 ACID  
 613 PHOSPHATASE#  
 0 PHOSPHATIDIC ACID PHOSPHATASE#  
 (PHOSPHATIDIC (W) ACID (W) PHOSPHATASE#)  
 1 PHOSPHATIDATE  
 8 PHOSPHOHYDROLASE#  
 0 PHOSPHATIDATE PHOSPHOHYDROLASE#  
 (PHOSPHATIDATE (W) PHOSPHOHYDROLASE#)  
 L8 0 PHOSPHATIDIC ACID PHOSPHATASE# OR PHOSPHATIDATE PHOSPHOHYD  
 ROLASE#

FILE 'WPIDS'

275 PHOSPHATIDIC  
 606235 ACID  
 1585 PHOSPHATASE#  
 1 PHOSPHATIDIC ACID PHOSPHATASE#  
 (PHOSPHATIDIC (W) ACID (W) PHOSPHATASE#)  
 6 PHOSPHATIDATE

```

      10 PHOSPHOHYDROLASE#
      0 PHOSPHATIDATE PHOSPHOHYDROLASE#
        (PHOSPHATIDATE(W)PHOSPHOHYDROLASE#)
L9      1 PHOSPHATIDIC ACID PHOSPHATASE# OR PHOSPHATIDATE PHOSPHOHYD
        ROLASE#
```

TOTAL FOR ALL FILES

```
L10      2047 PHOSPHATIDIC ACID PHOSPHATASE# OR PHOSPHATIDATE PHOSPHOHYD
        ROLASE#
```

=> s l10(10a)(isolat? or purif?)

FILE 'MEDLINE'

```
      692706 ISOLAT?
      477377 PURIF?
L11      33 L1 (10A) (ISOLAT? OR PURIF?)
```

FILE 'SCISEARCH'

```
      340753 ISOLAT?
      145892 PURIF?
L12      25 L2 (10A) (ISOLAT? OR PURIF?)
```

FILE 'LIFESCI'

```
      186553 ISOLAT?
      81676 PURIF?
L13      9 L3 (10A) (ISOLAT? OR PURIF?)
```

FILE 'BIOTECHDS'

```
      47988 ISOLAT?
      41436 PURIF?
L14      0 L4 (10A) (ISOLAT? OR PURIF?)
```

FILE 'BIOSIS'

```
      555356 ISOLAT?
      229692 PURIF?
L15      29 L5 (10A) (ISOLAT? OR PURIF?)
```

FILE 'EMBASE'

```
      397181 ISOLAT?
      163763 PURIF?
L16      28 L6 (10A) (ISOLAT? OR PURIF?)
```

FILE 'HCAPLUS'

```
      623744 ISOLAT?
      445414 PURIF?
L17      37 L7 (10A) (ISOLAT? OR PURIF?)
```

FILE 'NTIS'

```
      28742 ISOLAT?
      11066 PURIF?
L18      0 L8 (10A) (ISOLAT? OR PURIF?)
```

FILE 'WPIDS'

```
      101230 ISOLAT?
      99431 PURIF?
L19      0 L9 (10A) (ISOLAT? OR PURIF?)
```

TOTAL FOR ALL FILES

```
L20      161 L10(10A) (ISOLAT? OR PURIF?)
```

=> s l10(10a)human

FILE 'MEDLINE'

```
      6084695 HUMAN
L21      10 L1 (10A) HUMAN
```

```

FILE 'SCISEARCH'
      632231 HUMAN
L22      13 L2 (10A) HUMAN

FILE 'LIFESCI'
      203771 HUMAN
L23      3 L3 (10A) HUMAN

FILE 'BIOTECHDS'
      27877 HUMAN
L24      0 L4 (10A) HUMAN

FILE 'BIOSIS'
      3904522 HUMAN
L25      15 L5 (10A) HUMAN

FILE 'EMBASE'
      3162513 HUMAN
L26      9 L6 (10A) HUMAN

FILE 'HCAPLUS'
      652204 HUMAN
L27      21 L7 (10A) HUMAN

FILE 'NTIS'
      68709 HUMAN
L28      0 L8 (10A) HUMAN

FILE 'WPIDS'
      56430 HUMAN
L29      0 L9 (10A) HUMAN

TOTAL FOR ALL FILES
L30      71 L10(10A) HUMAN

=> s 110(10a)gene/q
FILE 'MEDLINE'
L31      2 L1 (10A) GENE/Q

FILE 'SCISEARCH'
L32      0 L2 (10A) GENE/Q

FILE 'LIFESCI'
L33      0 L3 (10A) GENE/Q

FILE 'BIOTECHDS'
L34      0 L4 (10A) GENE/Q

FILE 'BIOSIS'
L35      2 L5 (10A) GENE/Q

FILE 'EMBASE'
L36      2 L6 (10A) GENE/Q

FILE 'HCAPLUS'
L37      4 L7 (10A) GENE/Q

FILE 'NTIS'
L38      0 L8 (10A) GENE/Q

FILE 'WPIDS'
L39      0 L9 (10A) GENE/Q

TOTAL FOR ALL FILES

```

L40 10 L10(10A) GENE/Q

=> s 120 or 130 or 140

FILE 'MEDLINE'

L41 45 L11 OR L21 OR L31

FILE 'SCISEARCH'

L42 38 L12 OR L22 OR L32

FILE 'LIFESCI'

L43 12 L13 OR L23 OR L33

FILE 'BIOTECHDS'

L44 0 L14 OR L24 OR L34

FILE 'BIOSIS'

L45 46 L15 OR L25 OR L35

FILE 'EMBASE'

L46 39 L16 OR L26 OR L36

FILE 'HCAPLUS'

L47 61 L17 OR L27 OR L37

FILE 'NTIS'

L48 0 L18 OR L28 OR L38

FILE 'WPIDS'

L49 0 L19 OR L29 OR L39

TOTAL FOR ALL FILES

L50 241 L20 OR L30 OR L40

=> dup rem 150

PROCESSING COMPLETED FOR L50

L51 89 DUP REM L50 (152 DUPLICATES REMOVED)

=> d 1-

L51 ANSWER 1 OF 89 SCISEARCH COPYRIGHT 1997 ISI (R) DUPLICATE 1

TI Cloning and characterization of two **human** isozymes of  
Mg<sup>2+</sup>-independent **phosphatidic acid**

**phosphatase**

SO JOURNAL OF BIOLOGICAL CHEMISTRY, (26 SEP 1997) Vol. 272, No. 39, pp.  
24572-24578.

Publisher: AMER SOC BIOCHEMISTRY MOLECULAR BIOLOGY INC, 9650  
ROCKVILLE PIKE, BETHESDA, MD 20814.  
ISSN: 0021-9258.

AU Kai M; Wada I; Imai S; Sakane F; Kanoh H (Reprint)

AN 97:734688 SCISEARCH

L51 ANSWER 2 OF 89 SCISEARCH COPYRIGHT 1997 ISI (R) DUPLICATE 2

TI Erythromycin A-derived macrolides modify the functional activities  
of **human** neutrophils by altering the phospholipase D-

**phosphatidate phosphohydrolase** transduction

pathway - L-cladinose is involved both in alterations of neutrophil  
functions and modulation of this transductional pathway

SO JOURNAL OF IMMUNOLOGY, (15 OCT 1997) Vol. 159, No. 8, pp. 3995-4005.  
Publisher: AMER ASSOC IMMUNOLOGISTS, 9650 ROCKVILLE PIKE, BETHESDA,  
MD 20814.

ISSN: 0022-1767.

AU Abdelghaffar H; Vazifeh D; Labro M T (Reprint)

AN 97:760649 SCISEARCH

L51 ANSWER 3 OF 89 MEDLINE DUPLICATE 3  
 TI An unexpected structural relationship between integral membrane  
 phosphatases and soluble haloperoxidases.  
 SO PROTEIN SCIENCE, (1997 Aug) 6 (8) 1764-7.  
 Journal code: BNW. ISSN: 0961-8368.  
 AU Neuwald A F  
 AN 97406916 MEDLINE

L51 ANSWER 4 OF 89 BIOSIS COPYRIGHT 1997 BIOSIS  
 TI Two **human** type 2 **phosphatidic acid**  
**phosphatase** isozymes.  
 SO 17th International Congress of Biochemistry and Molecular Biology in  
 conjunction with the Annual Meeting of the American Society for  
 Biochemistry and Molecular Biology, San Francisco, California, USA,  
 August 24-29, 1997. FASEB Journal 11 (9). 1997. A1344. ISSN:  
 0892-6638  
 AU Kai M; Wada I; Kanoh H  
 AN 97:422112 BIOSIS

L51 ANSWER 5 OF 89 HCAPLUS COPYRIGHT 1997 ACS  
 TI Lipopolyamines as transfection agents and pharmaceutical uses  
 thereof  
 SO PCT Int. Appl., 36 pp.  
 CODEN: PIXXD2  
 IN Byk, Gerardo; Dubertret, Catherine; Scherman, Daniel  
 AN 1996:506088 HCAPLUS  
 DN 125:160332  
 PI WO 9617823 A1 960613

L51 ANSWER 6 OF 89 MEDLINE DUPLICATE 4  
 TI Identification and cDNA cloning of 35-kDa phosphatidic acid  
 phosphatase (type 2) bound to plasma membranes. Polymerase chain  
 reaction amplification of mouse H2O2-inducible hic53 clone yielded  
 the cDNA encoding phosphatidic acid phosphatase.  
 SO JOURNAL OF BIOLOGICAL CHEMISTRY, (1996 Aug 2) 271 (31) 18931-8.  
 Journal code: HIV. ISSN: 0021-9258.  
 AU Kai M; Wada I; Imai S; Sakane F; Kanoh H  
 AN 96324980 MEDLINE

L51 ANSWER 7 OF 89 MEDLINE DUPLICATE 5  
 TI Phosphatidate phosphohydrolase catalyzes the hydrolysis of ceramide  
 1-phosphate, lysophosphatidate, and sphingosine 1-phosphate.  
 SO JOURNAL OF BIOLOGICAL CHEMISTRY, (1996 Jul 12) 271 (28) 16506-9.  
 Journal code: HIV. ISSN: 0021-9258.  
 AU Waggoner D W; Gomez-Munoz A; Dewald J; Brindley D N  
 AN 96279213 MEDLINE

L51 ANSWER 8 OF 89 LIFESCI COPYRIGHT 1997 CSA DUPLICATE 6  
 TI Regulation of phosphatidate phosphatase activity from the yeast  
 Saccharomyces cerevisiae by phospholipids  
 SO BIOCHEMISTRY (WASH.), (1996) vol. 35, no. 12, pp. 3790-3796.  
 ISSN: 0006-2960.  
 AU Wu, Wen-I; Carman, G.M.\*  
 AN 97:2290 LIFESCI

L51 ANSWER 9 OF 89 MEDLINE DUPLICATE 7  
 TI Identification of **phosphatidate phosphohydrolase**  
**purified** from rat liver membranes on SDS-polyacrylamide gel  
 electrophoresis.  
 SO FEBS LETTERS, (1996 Mar 4) 381 (3) 169-73.  
 Journal code: EUH. ISSN: 0014-5793.  
 AU Siess E A; Hofstetter M M  
 AN 96176315 MEDLINE

L51 ANSWER 10 OF 89 MEDLINE DUPLICATE 8  
 TI **Purification** and characterization of novel plasma membrane  
**phosphatidate phosphohydrolase** from rat liver.  
 SO JOURNAL OF BIOLOGICAL CHEMISTRY, (1995 Aug 18) 270 (33) 19422-9.  
 Journal code: HIV. ISSN: 0021-9258.  
 AU Waggoner D W; Martin A; Dewald J; Gomez-Munoz A; Brindley D N  
 AN 95370279 MEDLINE

L51 ANSWER 11 OF 89 MEDLINE DUPLICATE 9  
 TI A phospholipase D-mediated pathway for generating diacylglycerol in  
 nuclei from Madin-Darby canine kidney cells.  
 SO JOURNAL OF BIOLOGICAL CHEMISTRY, (1995 May 19) 270 (20) 11738-40.  
 Journal code: HIV. ISSN: 0021-9258.  
 AU Balboa M A; Balsinde J; Dennis E A; Insel P A  
 AN 95263508 MEDLINE

L51 ANSWER 12 OF 89 HCAPLUS COPYRIGHT 1997 ACS  
 TI Identification of type-2 phosphatidic acid phosphohydrolase (PAPH-2)  
 in neutrophil plasma membranes  
 SO Cell. Signalling (1994), 6(8), 933-41  
 CODEN: CESIEY; ISSN: 0898-6568  
 AU Boder, Eric; Taylor, Greg; Akard, Luke; Jansen, Jan; English, Denis  
 AN 1995:424654 HCAPLUS  
 DN 122:210388

L51 ANSWER 13 OF 89 SCISEARCH COPYRIGHT 1997 ISI (R)  
 TI INCREASED ACTIVITY OF **PHOSPHATIDATE**  
**PHOSPHOHYDROLASE** IN HUMAN COLORECTAL TUMORS  
 SO JOURNAL OF CELLULAR BIOCHEMISTRY, (1994) Supp. 18D, pp. 60.  
 ISSN: 0730-2312.  
 AU SCOTT P H (Reprint); MARTIN A; BRINDLEY D N; PLUMB J A  
 AN 94:275051 SCISEARCH

L51 ANSWER 14 OF 89 BIOSIS COPYRIGHT 1997 BIOSIS  
 TI Increased activity of **phosphatidate**  
**phosphohydrolase** in human colorectal tumours.  
 SO Keystone Symposium on Lipid Second Messengers, Taos, New Mexico, USA,  
 February 26-March 4, 1994. Journal of Cellular Biochemistry  
 Supplement 0 (18D). 1994. 60. ISSN: 0733-1959  
 AU Scott P H; Martin A; Brindley D N; Plumb J A  
 AN 94:282392 BIOSIS

L51 ANSWER 15 OF 89 HCAPLUS COPYRIGHT 1997 ACS  
 TI The role of phosphatidic acid phosphohydrolase in human neutrophil  
 signal transduction  
 SO (1993) 214 pp. Avail.: Univ. Microfilms Int., Order No. DA9415100  
 From: Diss. Abstr. Int. B 1994, 54(12, Pt. 1), 6187  
 AU Perry, David Kenneth  
 AN 1994:532183 HCAPLUS  
 DN 121:132183

L51 ANSWER 16 OF 89 HCAPLUS COPYRIGHT 1997 ACS  
 TI A novel ecto-phosphatidic acid phosphohydrolase activity mediates  
 activation of neutrophil superoxide generation by exogenous  
 phosphatidic acid  
 SO J. Biol. Chem. (1993), 268(34), 25302-10  
 CODEN: JBCHA3; ISSN: 0021-9258  
 AU Perry, David K.; Stevens, Victoria L.; Widlanski, Theodore S.;  
 Lambeth, J. David  
 AN 1993:624002 HCAPLUS  
 DN 119:224002

L51 ANSWER 17 OF 89 HCAPLUS COPYRIGHT 1997 ACS  
 TI Decreased activities of phosphatidate phosphohydrolase and

phospholipase D in ras and tyrosine kinase (fps) transformed fibroblasts

SO J. Biol. Chem. (1993), 268(32), 23924-32  
CODEN: JBCHA3; ISSN: 0021-9258

AU Martin, Ashley; Gomez-Munoz, Antonio; Waggoner, David W.; Stone, James C.; Brindley, David N.

AN 1993:600471 HCAPLUS

DN 119:200471

L51 ANSWER 18 OF 89 MEDLINE DUPLICATE 10

TI The activity of the metabolic form of hepatic **phosphatidate phosphohydrolase** correlates with the severity of alcoholic fatty liver in **human** beings.

SO HEPATOLOGY, (1993 Oct) 18 (4) 832-8.  
Journal code: GBZ. ISSN: 0270-9139.

AU Day C P; James O F; Brown A S; Bennett M K; Fleming I N; Yeaman S J

AN 94010748 MEDLINE

L51 ANSWER 19 OF 89 MEDLINE DUPLICATE 11

TI Studies on triglyceride metabolism: phosphatidate phosphohydrolase from guinea pig harderian gland.

SO SCANDINAVIAN JOURNAL OF CLINICAL AND LABORATORY INVESTIGATION, (1993 Aug) 53 (5) 493-8.  
Journal code: UCP. ISSN: 0036-5513.

AU Humble E; Berglund L

AN 94023775 MEDLINE

L51 ANSWER 20 OF 89 BIOSIS COPYRIGHT 1997 BIOSIS

TI ROLE OF PHOSPHATIDYLCHOLINE METABOLISM IN THE UPREGULATION OF B-2 INTERGRIN-DEPENDENT NEUTROPHIL ADHESIVENESS.

SO JOINT MEETING OF THE AMERICAN ASSOCIATION OF IMMUNOLOGISTS AND THE CLINICAL IMMUNOLOGY SOCIETY, DENVER, COLORADO, USA, MAY 21-25, 1993. J IMMUNOL 150 (8 PART 2). 1993. 304A. CODEN: JOIMA3 ISSN: 0022-1767

AU WRIGHT C D; KUIPERS P J; KENNEDY J A

AN 93:334875 BIOSIS

L51 ANSWER 21 OF 89 MEDLINE DUPLICATE 12

TI Differential properties of phosphatidate phosphohydrolase and diacylglyceride lipase activities in retinal subcellular fractions and rod outer segments.

SO COMPARATIVE BIOCHEMISTRY AND PHYSIOLOGY. B: COMPARATIVE BIOCHEMISTRY, (1993 Jan) 104 (1) 141-8.  
Journal code: DNV. ISSN: 0305-0491.

AU Pasquare S J; Giusto N M

AN 93193415 MEDLINE

L51 ANSWER 22 OF 89 MEDLINE DUPLICATE 13

TI Low concentration of Triton X-100 inhibits diacylglycerol acyltransferase without measurable effect on **phosphatidate phosphohydrolase** in the **human** primordial placenta.

SO ACTA PHYSIOLOGICA HUNGARICA, (1993) 81 (1) 101-8.  
Journal code: IRS. ISSN: 0231-424X.

AU Gimes G; Toth M

AN 94233949 MEDLINE

L51 ANSWER 23 OF 89 HCAPLUS COPYRIGHT 1997 ACS

TI Evaluation of phospholipase C and D activity in stimulated human neutrophils using a phosphono analog of choline phosphoglyceride

SO Biochim. Biophys. Acta (1993), 1169(1), 25-9  
CODEN: BBACAQ; ISSN: 0006-3002

AU Strum, Jay C.; Nixon, Andrew B.; Daniel, Larry W.; Wykle, Robert L.

AN 1993:536385 HCAPLUS

DN 119:136385



L51 ANSWER 24 OF 89 MEDLINE DUPLICATE 14  
 TI **Purification** and properties of **phosphatidic acid phosphatase** from porcine thymus membranes.  
 SO JOURNAL OF BIOLOGICAL CHEMISTRY, (1992 Dec 15) 267 (35) 25309-14.  
 Journal code: HIV. ISSN: 0021-9258.  
 AU Kanoh H; Imai S; Yamada K; Sakane F  
 AN 93094244 MEDLINE

L51 ANSWER 25 OF 89 HCAPLUS COPYRIGHT 1997 ACS  
 TI Role of phospholipase D-derived diradylglycerol in the activation of the human neutrophil respiratory burst oxidase. Inhibition by phosphatidic acid phosphohydrolase inhibitors  
 SO J. Immunol. (1992), 149(8), 2749-58  
 CODEN: JOIMA3; ISSN: 0022-1767  
 AU Perry, David K.; Hand, W. Lee; Edmondson, Dale E.; Lambeth, J. David  
 AN 1993:122904 HCAPLUS  
 DN 118:122904

L51 ANSWER 26 OF 89 HCAPLUS COPYRIGHT 1997 ACS  
 TI Regulation of phosphatidic acid phosphohydrolase activity during stimulation of human polymorphonuclear leukocytes  
 SO FASEB J. (1992), 6(9), 2720-5  
 CODEN: FAJOEC; ISSN: 0892-6638  
 AU Truett, A. P., III; Bocckino, S. B.; Murray, J. J.  
 AN 1992:468339 HCAPLUS  
 DN 117:68339

L51 ANSWER 27 OF 89 MEDLINE DUPLICATE 15  
 TI Vanadate-sensitive **phosphatidate phosphohydrolase** activity in a **purified** rabbit kidney Na,K-ATPase preparation.  
 SO BIOCHIMICA ET BIOPHYSICA ACTA, (1992 Jun 11) 1107 (1) 143-9.  
 Journal code: AOW. ISSN: 0006-3002.  
 AU Swarts H G; Moes M; Schuurmans Stekhoven F M; De Pont J J  
 AN 92314021 MEDLINE

L51 ANSWER 28 OF 89 MEDLINE DUPLICATE 16  
 TI Interleukin-1 rapidly stimulates lysophosphatidate acyltransferase and **phosphatidate phosphohydrolase** activities in **human** mesangial cells.  
 SO JOURNAL OF BIOLOGICAL CHEMISTRY, (1991 Nov 5) 266 (31) 20732-43.  
 Journal code: HIV. ISSN: 0021-9258.  
 AU Bursten S L; Harris W E; Bomsztyk K; Lovett D  
 AN 92041927 MEDLINE

L51 ANSWER 29 OF 89 HCAPLUS COPYRIGHT 1997 ACS  
 TI De novo synthesis of diacylglycerol from glucose. A new pathway of signal transduction in human neutrophils stimulated during phagocytosis of .beta.-glucan particles  
 SO J. Biol. Chem. (1991), 266(13), 8034-8  
 CODEN: JBCHA3; ISSN: 0021-9258  
 AU Rossi, Filippo; Grzewkowiak, Mirosława; Della Bianca, Vittorina; Sharbati, Andrea  
 AN 1991:245819 HCAPLUS  
 DN 114:245819

L51 ANSWER 30 OF 89 MEDLINE DUPLICATE 17  
 TI Sphingosine inhibits **phosphatidate phosphohydrolase** in **human** neutrophils by a protein kinase C-independent mechanism.  
 SO JOURNAL OF BIOLOGICAL CHEMISTRY, (1991 Feb 5) 266 (4) 2013-6.  
 Journal code: HIV. ISSN: 0021-9258.  
 AU Mullmann T J; Siegel M I; Egan R W; Billah M M  
 AN 91115804 MEDLINE

L51 ANSWER 31 OF 89 SCISEARCH COPYRIGHT 1997 ISI (R) DUPLICATE 18  
 TI LIPID BREAKDOWN IN SMOOTH MICROSOMAL-MEMBRANES FROM BEAN COTYLEDONS  
 ALTERS MEMBRANE-PROTEINS AND INDUCES PROTEOLYSIS  
 SO JOURNAL OF EXPERIMENTAL BOTANY, (1991) Vol. 42, No. 234, pp.  
 103-112.  
 AU DUXBURY C L; LEGGE R L; PALIYATH G; THOMPSON J E (Reprint)  
 AN 91:68554 SCISEARCH

L51 ANSWER 32 OF 89 BIOSIS COPYRIGHT 1997 BIOSIS  
 TI REGULATION OF **HUMAN PHOSPHATIDATE**  
**PHOSPHOHYDROLASE** IN **HUMAN LIVER**.  
 SO 26TH MEETING OF THE EUROPEAN ASSOCIATION FOR THE STUDY OF THE LIVER,  
 PALMA DE MALLORCA, SPAIN, SEPTEMBER 11-14, 1991. J HEPATOL (AMST) 13  
 (SUPPL. 2). 1991. S23. CODEN: JOHEEC ISSN: 0168-8278  
 AU DAY C P; JAMES O F W; YEAMAN S J  
 AN 92:86892 BIOSIS

L51 ANSWER 33 OF 89 BIOSIS COPYRIGHT 1997 BIOSIS  
 TI SPHINGOSINE INHIBITS **PHOSPHATIDATE PHOSPHOHYDROLASE**  
 PPB-CATALYZED PRODUCTION OF DIGLYCERIDES DG IN **HUMAN**  
 NEUTROPHILS.  
 SO JOINT MEETING OF THE AMERICAN SOCIETY FOR BIOCHEMISTRY AND MOLECULAR  
 BIOLOGY, AND THE AMERICAN ASSOCIATION OF IMMUNOLOGISTS, NEW ORLEANS,  
 LOUISIANA, USA, JUNE 4-7, 1990. FASEB (FED AM SOC EXP BIOL) J 4 (7).  
 1990. A2060. CODEN: FAJOEC ISSN: 0892-6638  
 AU MULLMANN T J; SIEGEL M I; EGAN R W; BILLAH M M  
 AN 90:346613 BIOSIS

L51 ANSWER 34 OF 89 MEDLINE DUPLICATE 19  
 TI Properties of **phosphatidate phosphohydrolase** and  
 diacylglycerol acyltransferase activities in the **isolated**  
 rat heart. Effect of glucagon, ischaemia and diabetes.  
 SO BIOCHEMICAL JOURNAL, (1990 Jun 1) 268 (2) 487-92.  
 Journal code: 9YO. ISSN: 0264-6021.  
 AU Schoonderwoerd K; Broekhoven-Schokker S; Hulsmann W C; Stam H  
 AN 90303231 MEDLINE

L51 ANSWER 35 OF 89 MEDLINE DUPLICATE 20  
 TI Inhibitory effect of epinephrine on phosphatidate activity in  
 isolated rat hepatocytes.  
 SO ENDOCRINOLOGIE, (1990 Jul-Dec) 28 (3-4) 149-54.  
 Journal code: T36. ISSN: 0035-4015.  
 AU Haghighi B; Raspuli M; Suzangar M  
 AN 91368151 MEDLINE

L51 ANSWER 36 OF 89 MEDLINE DUPLICATE 21  
 TI Phosphatidylcholine hydrolysis by phospholipase D determines  
 phosphatidate and diglyceride levels in chemotactic  
 peptide-stimulated **human** neutrophils. Involvement of  
**phosphatidate phosphohydrolase** in signal  
 transduction.  
 SO JOURNAL OF BIOLOGICAL CHEMISTRY, (1989 Oct 15) 264 (29) 17069-77.  
 Journal code: HIV. ISSN: 0021-9258.  
 AU Billah M M; Eckel S; Mullmann T J; Egan R W; Siegel M I  
 AN 90008859 MEDLINE

L51 ANSWER 37 OF 89 MEDLINE DUPLICATE 22  
 TI Apparent lack of effect of obesity on the soluble  
**phosphatidic acid phosphatase** activity  
 in **human** adipose tissue.  
 SO LIPIDS, (1989 Dec) 24 (12) 1048-52.  
 Journal code: L73. ISSN: 0024-4201.  
 AU Bjorkhem I; al-Shurbaji A; Backman L; Arner P

AN 90135864 MEDLINE

L51 ANSWER 38 OF 89 MEDLINE DUPLICATE 23  
 TI Rat adipose tissue phosphatidic acid phosphatase: lack of effect of nucleotides on cytosolic enzyme activity.  
 SO ACTA CHEMICA SCANDINAVICA, (1989 Aug) 43 (7) 680-3.  
 Journal code: ATM. ISSN: 0904-213X.  
 AU al-Shurbaji A; Berglund L  
 AN 91058841 MEDLINE

L51 ANSWER 39 OF 89 HCAPLUS COPYRIGHT 1997 ACS  
 TI Phospholipase D activation is functionally linked to superoxide generation in the human neutrophil  
 SO Biochem. J. (1989), 264(2), 617-20  
 CODEN: BIJOAK; ISSN: 0306-3275  
 AU Bonser, Robert W.; Thompson, Neil T.; Randall, Roger W.; Garland, Lawrence G.  
 AN 1990:19837 HCAPLUS  
 DN 112:19837

L51 ANSWER 40 OF 89 MEDLINE DUPLICATE 24  
 TI **Phosphatidate phosphohydrolase in purified rat brain myelin.**  
 SO JOURNAL OF NEUROSCIENCE RESEARCH, (1989 Nov) 24 (3) 431-6.  
 Journal code: KAC. ISSN: 0360-4012.  
 AU Vaswani K K; Ledeen R W  
 AN 90080028 MEDLINE

L51 ANSWER 41 OF 89 MEDLINE DUPLICATE 25  
 TI Activation of rat liver cytosolic phosphatidic acid phosphatase by nucleoside diphosphates.  
 SO BIOCHIMICA ET BIOPHYSICA ACTA, (1989 Apr 26) 1002 (3) 382-7.  
 Journal code: AOW. ISSN: 0006-3002.  
 AU Berglund L; Bjorkhem I; Angelin B; Einarsson K  
 AN 89229186 MEDLINE

L51 ANSWER 42 OF 89 BIOSIS COPYRIGHT 1997 BIOSIS  
 TI MECHANISM OF ACTION OF BILE ACID SEQUESTRANTS AND OTHER LIPID-LOWERING DRUGS.  
 SO WORKSHOP ON A NEW ERA OF LIPID-LOWERING DRUG ALTERNATIVES, LAGUNA NIGUEL, CALIFORNIA, USA. CARDIOLOGY 76 (SUPPL. 1). 1989. 65-74.  
 CODEN: CAGYAO ISSN: 0008-6312  
 AU SHEPHERD J  
 AN 89:349858 BIOSIS

L51 ANSWER 43 OF 89 BIOSIS COPYRIGHT 1997 BIOSIS  
 TI MEMBRANE-BOUND PHOSPHATASES IN ESCHERICHIA-COLI SEQUENCE OF THE PGP-B GENE AND DUAL SUBCELLULAR LOCALIZATION OF THE PGP-B PRODUCT.  
 SO J BACTERIOL 170 (11). 1988. 5117-5124. CODEN: JOBAAY ISSN: 0021-9193  
 AU ICHO T  
 AN 89:50196 BIOSIS

L51 ANSWER 44 OF 89 MEDLINE DUPLICATE 26  
 TI The phosphatidylcholine pathway of diacylglycerol formation stimulated by phorbol diesters occurs via phospholipase D activation.  
 SO FEBS LETTERS, (1988 Jun 6) 233 (1) 153-7.  
 Journal code: EUH. ISSN: 0014-5793.  
 AU Cabot M C; Welsh C J; Cao H T; Chabbott H  
 AN 88255281 MEDLINE

L51 ANSWER 45 OF 89 HCAPLUS COPYRIGHT 1997 ACS  
 TI Accumulation of triacylglycerol in human fetal organs  
 SO Indian J. Med. Res. (1987), 86(Sept.), 401-9

CODEN: IJMRAQ; ISSN: 0019-5340

AU Chandra, Nimai Chand; Bhattacharyya, Reba; Samanta, Bimal Krishna;  
Dutta, Gita; Mukherjee, Kanailal

AN 1987:633732 HCAPLUS

DN 107:233732

L51 ANSWER 46 OF 89 HCAPLUS COPYRIGHT 1997 ACS

TI A rapid assay for measuring the activity and the magnesium and  
calcium requirements of phosphatidate phosphohydrolase in cytosolic  
and microsomal fractions of rat liver

SO Biochem. J. (1987), 245(2), 347-55

CODEN: BIJOAK; ISSN: 0306-3275

AU Martin, Ashley; Hales, Paul; Brindley, David N.

AN 1987:492412 HCAPLUS

DN 107:92412

L51 ANSWER 47 OF 89 HCAPLUS COPYRIGHT 1997 ACS

TI The magnesium(2+)-dependent phosphatidate phosphohydrolase of rat  
lung

SO (1986) No pp. Given Avail.: NLC

From: Diss. Abstr. Int. B 1986, 47(5), 1976

AU Walton, Paul Albert

AN 1987:46204 HCAPLUS

DN 106:46204

L51 ANSWER 48 OF 89 HCAPLUS COPYRIGHT 1997 ACS

TI Translocation of magnesium-dependent phosphatidate phosphohydrolase  
between cytosol and endoplasmic reticulum in a permanent cell line  
from human lung

SO Biochem. Cell Biol. (1986), 64(11), 1135-40

CODEN: BCBIEQ

AU Walton, Paul A.; Possmayer, Fred

AN 1986:588472 HCAPLUS

DN 105:188472

L51 ANSWER 49 OF 89 BIOSIS COPYRIGHT 1997 BIOSIS DUPLICATE 27

TI LIPID COMPOSITION OF PLASMA MEMBRANES AND TONOPLASTS ISOLATED FROM  
ETIOLATED SEEDLINGS OF MUNG BEAN VIGNA-RADIATA.

SO PLANT PHYSIOL (BETHESDA) 82 (3). 1986. 807-812. CODEN: PLPHAY ISSN:  
0032-0889

AU YOSHIDA S; UEMURA M

AN 87:83039 BIOSIS

L51 ANSWER 50 OF 89 MEDLINE DUPLICATE 28

TI **Isolation and characterization of multiple forms of**  
**Mg2+-dependent phosphatidate phosphohydrolase**  
from rat adipose cytosol.

SO BIOCHIMICA ET BIOPHYSICA ACTA, (1986 Sep 12) 878 (2) 225-37.

Journal code: AOW. ISSN: 0006-3002.

AU Wells G N; Osborne L J; Jamdar S C

AN 87000664 MEDLINE

L51 ANSWER 51 OF 89 MEDLINE DUPLICATE 29

TI Phosphatidate phosphatase activity in isolated rod outer segment  
from bovine retina.

SO BIOCHIMICA ET BIOPHYSICA ACTA, (1986 Feb 12) 875 (2) 195-202.

Journal code: AOW. ISSN: 0006-3002.

AU Pasquare de Garcia S J; Giusto N M

AN 86104365 MEDLINE

L51 ANSWER 52 OF 89 MEDLINE DUPLICATE 30

TI Insulin antagonises the growth hormone-mediated increase in the  
activity of **phosphatidate phosphohydrolase** in  
**isolated rat hepatocytes.**

SO FEBS LETTERS, (1986 Jun 23) 202 (1) 133-6.  
Journal code: EUH. ISSN: 0014-5793.

AU Pittner R A; Bracken P; Fears R; Brindley D N  
AN 86248068 MEDLINE

L51 ANSWER 53 OF 89 MEDLINE DUPLICATE 31  
TI Spermine antagonises the effects of dexamethasone, glucagon and  
cyclic AMP in increasing the activity of **phosphatidate  
phosphohydrolase** in **isolated** rat hepatocytes.

SO FEBS LETTERS, (1986 Oct 20) 207 (1) 42-6.  
Journal code: EUH. ISSN: 0014-5793.

AU Pittner R A; Bracken P; Fears R; Brindley D N  
AN 87030901 MEDLINE

L51 ANSWER 54 OF 89 SCISEARCH COPYRIGHT 1997 ISI (R)  
TI **PURIFICATION AND CHARACTERIZATION OF PHOSPHATIDATE  
PHOSPHOHYDROLASE** FROM RAT EPIDIDYMAL FAT

SO FEDERATION PROCEEDINGS, (1985) Vol. 44, No. 5, pp. 1787.  
AU WELLS G N (Reprint); JAMDAR S C; OSBORNE L J  
AN 85:178528 SCISEARCH

L51 ANSWER 55 OF 89 SCISEARCH COPYRIGHT 1997 ISI (R)  
TI THE CHARACTERIZATION OF **PURIFIED** MG-2&-DEPENDENT  
**PHOSPHATIDATE PHOSPHOHYDROLASES (PPH)** FROM RAT  
ADIPOSE CYTOSOL

SO FEDERATION PROCEEDINGS, (1985) Vol. 44, No. 5, pp. 1787.  
AU JAMDAR S C (Reprint); WELLS G N; OSBORNE L J  
AN 85:178526 SCISEARCH

L51 ANSWER 56 OF 89 BIOSIS COPYRIGHT 1997 BIOSIS  
TI **PURIFICATION AND CHARACTERIZATION OF PHOSPHATIDATE  
PHOSPHOHYDROLASES** FROM RAT EPIDIDYMAL RAT.

SO 69TH ANNUAL MEETING OF THE FEDERATION OF AMERICAN SOCIETIES FOR  
EXPERIMENTAL BIOLOGY, ANAHEIM, CALIF., USA, APR. 21-26, 1985. FED  
PROC 44 (5). 1985. 1787. CODEN: FEPA7 ISSN: 0014-9446

AU WELLS G N; JAMDAR S C; OSBORNE L J  
AN 85:160523 BIOSIS

L51 ANSWER 57 OF 89 BIOSIS COPYRIGHT 1997 BIOSIS  
TI THE CHARACTERIZATION OF **PURIFIED** MAGNESIUM-DEPENDENT  
**PHOSPHATIDATE PHOSPHOHYDROLASES** FROM RAT ADIPOSE  
CYTOSOL.

SO 69TH ANNUAL MEETING OF THE FEDERATION OF AMERICAN SOCIETIES FOR  
EXPERIMENTAL BIOLOGY, ANAHEIM, CALIF., USA, APR. 21-26, 1985. FED  
PROC 44 (5). 1985. 1787. CODEN: FEPA7 ISSN: 0014-9446

AU JAMDAR S C; WELLS G N; OSBORNE L J  
AN 85:160521 BIOSIS

L51 ANSWER 58 OF 89 MEDLINE DUPLICATE 32  
TI Effects of cyclic AMP, glucocorticoids and insulin on the activities  
of **phosphatidate phosphohydrolase**, tyrosine  
aminotransferase and glycerol kinase in **isolated** rat  
hepatocytes in relation to the control of triacylglycerol synthesis  
and gluconeogenesis.

SO BIOCHEMICAL JOURNAL, (1985 Jan 15) 225 (2) 455-62.  
Journal code: 9YO. ISSN: 0264-6021.

AU Pittner R A; Fears R; Brindley D N  
AN 85149210 MEDLINE

L51 ANSWER 59 OF 89 MEDLINE DUPLICATE 33  
TI Presence of membrane-associated phosphatidate phosphohydrolase  
activity in cultured islets and its stimulation by glucose.

SO FEBS LETTERS, (1985 Dec 2) 193 (2) 231-5.  
Journal code: EUH. ISSN: 0014-5793.

AU Dunlop M; Larkins R G  
AN 86056315 MEDLINE

L51 ANSWER 60 OF 89 MEDLINE DUPLICATE 34  
TI **Phosphatidic acid phosphatase** activity  
in subcellular fractions of normal and dystrophic human  
muscle.  
SO CLINICA CHIMICA ACTA, (1985 Mar 15) 146 (2-3) 167-74.  
Journal code: DCC. ISSN: 0009-8981.  
AU Kunze D; Rustow B; Olthoff D; Jung K  
AN 85177445 MEDLINE

L51 ANSWER 61 OF 89 EMBASE COPYRIGHT 1997 ELSEVIER SCI. B.V.  
TI **Purification** and characterization of **phosphatidate  
phosphohydrolase** from rat epididymal fat.  
SO FED. PROC., (1985) 44/5 (No. 8040).  
CODEN: FEPRA7  
AU Wells G.N.; Jamdar S.C.; Osborne L.J.  
AN 85128246 EMBASE

L51 ANSWER 62 OF 89 EMBASE COPYRIGHT 1997 ELSEVIER SCI. B.V.  
TI The characterization of **purified** Mg<sup>2+</sup>-dependent  
**phosphatidate phosphohydrolases** (PPH) from rat  
adipose cytosol.  
SO FED. PROC., (1985) 44/5 (No. 8041).  
CODEN: FEPRA7  
AU Jamdar S.C.; Wells G.N.; Osborne L.J.  
AN 85128247 EMBASE

L51 ANSWER 63 OF 89 BIOSIS COPYRIGHT 1997 BIOSIS  
TI PROGRESSIVE MUSCULAR DYSTROPHY AN INHERITED DEFECT OF LECITHIN  
BIOSYNTHESIS.  
SO JOINT ANNUAL MEETING OF THE AUSTRIAN BIOCHEMICAL SOCIETY AND THE  
AUSTRIAN SOCIETY FOR CLINICAL CHEMISTRY, INNSBRUCK, AUSTRIA, SEPT.  
24-26, 1984. HOPPE-SEYLER'S Z PHYSIOL CHEM 365 (9). 1984. 930-931.  
CODEN: HSZPAZ ISSN: 0018-4888  
AU KUNZE D; RUESTOW B; OLTHOFF D  
AN 85:72173 BIOSIS

L51 ANSWER 64 OF 89 MEDLINE DUPLICATE 35  
TI Oleic acid promotes the activation and translocation of  
**phosphatidate phosphohydrolase** from the cytosol to  
particulate fractions of **isolated** rat hepatocytes.  
SO BIOCHEMICAL JOURNAL, (1984 May 1) 219 (3) 911-6.  
Journal code: 9YO. ISSN: 0264-6021.  
AU Cascales C; Mangiapane E H; Brindley D N  
AN 84256600 MEDLINE

L51 ANSWER 65 OF 89 MEDLINE DUPLICATE 36  
TI Partial **purification** and characterization of the soluble  
**phosphatidate phosphohydrolase** of rat liver.  
SO BIOCHEMICAL JOURNAL, (1984 Jun 15) 220 (3) 825-33.  
Journal code: 9YO. ISSN: 0264-6021.  
AU Butterwith S C; Hopewell R; Brindley D N  
AN 84279991 MEDLINE

L51 ANSWER 66 OF 89 MEDLINE DUPLICATE 37  
TI The role of Mg<sup>2+</sup>-dependent phosphatidate phosphohydrolase in  
pulmonary glycerolipid biosynthesis.  
SO BIOCHIMICA ET BIOPHYSICA ACTA, (1984 Dec 6) 796 (3) 364-72.  
Journal code: AOW. ISSN: 0006-3002.  
AU Walton P A; Possmayer F  
AN 85072956 MEDLINE

L51 ANSWER 67 OF 89 MEDLINE DUPLICATE 38  
 TI Triglyceride metabolism in **human** liver: studies on hepatic  
**phosphatidic-acid phosphatase** in obese  
 and non-obese subjects.  
 SO EUROPEAN JOURNAL OF CLINICAL INVESTIGATION, (1984 Jun) 14 (3) 233-7.  
 Journal code: EN3. ISSN: 0014-2972.  
 AU Bjorkhem I; Angelin B; Backman L; Liljeqvist L; Nilzell K; Einarsson  
 K  
 AN 84285557 MEDLINE

L51 ANSWER 68 OF 89 MEDLINE DUPLICATE 39  
 TI Effect of salts on membrane binding and activity of adipocyte  
 phosphatidate phosphohydrolase.  
 SO BIOCHIMICA ET BIOPHYSICA ACTA, (1982 Jun 11) 711 (3) 521-31.  
 Journal code: AOW. ISSN: 0006-3002.  
 AU Moller F; Hough M R  
 AN 82257518 MEDLINE

L51 ANSWER 69 OF 89 HCAPLUS COPYRIGHT 1997 ACS  
 TI Biochemical assessment of fetal lung maturity  
 SO Ann. Clin. Lab. Sci. (1982), 12(5), 339-44  
 CODEN: ACLSCP; ISSN: 0091-7370  
 AU Forman, Donald T.  
 AN 1982:579653 HCAPLUS  
 DN 97:179653

L51 ANSWER 70 OF 89 MEDLINE DUPLICATE 40  
 TI Antagonistic effects of insulin on the corticosterone-induced  
 increase of **phosphatidate phosphohydrolase**  
 activity in **isolated** rat hepatocytes.  
 SO FEBS LETTERS, (1982 Jun 21) 143 (1) 9-12.  
 Journal code: EUH. ISSN: 0014-5793.  
 AU Lawson N; Jennings R J; Fears R; Brindley D N  
 AN 83004254 MEDLINE

L51 ANSWER 71 OF 89 SCISEARCH COPYRIGHT 1997 ISI (R) DUPLICATE 41  
 TI PURINE NUCLEOSIDE PHOSPHORYLASE **PHOSPHATIDIC-ACID**  
**PHOSPHATASE**-ACTIVITY OF **HUMAN**-FETAL BRAIN AND  
 LIVER  
 SO INDIAN JOURNAL OF BIOCHEMISTRY & BIOPHYSICS, (1981) Vol. 18, No. 4,  
 pp. 46.  
 AU DUTTA G (Reprint); CHANDRA N  
 AN 81:543897 SCISEARCH

L51 ANSWER 72 OF 89 MEDLINE DUPLICATE 42  
 TI Distribution of the phosphatidate phosphohydrolase activity in the  
 lamellar body and lysosomal fractions of lung tissue.  
 SO LIPIDS, (1980 Jun) 15 (6) 447-51.  
 Journal code: L73. ISSN: 0024-4201.  
 AU Okazaki T; Johnston J M  
 AN 80253769 MEDLINE

L51 ANSWER 73 OF 89 MEDLINE DUPLICATE 43  
 TI Hormonal regulation of hepatic soluble **phosphatidate**  
**phosphohydrolase**. Induction by cortisol in vivo and in  
**isolated** perfused rat liver.  
 SO FEBS LETTERS, (1979 Mar 1) 99 (1) 162-6.  
 Journal code: EUH. ISSN: 0014-5793.  
 AU Lehtonen M A; Savolainen M J; Hassinen I E  
 AN 79169847 MEDLINE

L51 ANSWER 74 OF 89 MEDLINE DUPLICATE 44  
 TI Phosphatidate phosphohydrolase activity in porcine pulmonary  
 surfactant.

SO AMERICAN REVIEW OF RESPIRATORY DISEASE, (1979 Jan) 119 (1) 75-80.  
Journal code: 426. ISSN: 0003-0805.

AU Delahunty T J; Spitzer H L; Jimenez J M; Johnston J M  
AN 79122550 MEDLINE

L51 ANSWER 75 OF 89 BIOSIS COPYRIGHT 1997 BIOSIS DUPLICATE 45  
TI ACTION AND INHIBITION OF ENDOGENOUS PHOSPHO LIPASES DURING ISOLATION  
OF PLANT MEMBRANES.

SO PLANT PHYSIOL (BETHESDA) 62 (6). 1978 (RECD. 1979). 933-937. CODEN:  
PLPHAY ISSN: 0032-0889

AU SCHERER G F E; MORRE D J  
AN 79:170379 BIOSIS

L51 ANSWER 76 OF 89 MEDLINE DUPLICATE 46  
TI Mechanisms for the effects of ethanol on hepatic phosphatidate  
phosphohydrolase.

SO BIOCHEMICAL JOURNAL, (1978 Dec 15) 176 (3) 885-92.  
Journal code: 9YO. ISSN: 0006-2936.

AU Savolainen M J; Hassinen I E  
AN 79144677 MEDLINE

L51 ANSWER 77 OF 89 MEDLINE DUPLICATE 47  
TI Fetal lung maturation: **human** amniotic fluid  
**phosphatidate phosphohydrolase** activity through  
normal gestation and its relation to the lecithin/sphingomyelin  
ratio.

SO AMERICAN JOURNAL OF OBSTETRICS AND GYNECOLOGY, (1978 Oct 15) 132 (4)  
373-9.  
Journal code: 3NI. ISSN: 0002-9378.

AU Herbert W N; Johnston J M; MacDonald P C; Jimenez J M  
AN 79039465 MEDLINE

L51 ANSWER 78 OF 89 MEDLINE DUPLICATE 48  
TI The measurement of **phosphatidate phosphohydrolase**  
in **human** amniotic fluid.

SO BIOCHIMICA ET BIOPHYSICA ACTA, (1978 Mar 30) 528 (3) 331-43.  
Journal code: AOW. ISSN: 0006-3002.

AU Bleasdale J E; Davis C S; Agranoff B W  
AN 78144828 MEDLINE

L51 ANSWER 79 OF 89 MEDLINE DUPLICATE 49  
TI Characterization of **phosphatidate phosphohydrolase**  
activity associated with **isolated** lamellar bodies.

SO BIOCHIMICA ET BIOPHYSICA ACTA, (1978 Dec 22) 531 (3) 275-85.  
Journal code: AOW. ISSN: 0006-3002.

AU Spitzer H L; Johnston J M  
AN 79103857 MEDLINE

L51 ANSWER 80 OF 89 BIOSIS COPYRIGHT 1997 BIOSIS DUPLICATE 50  
TI A RAPID SENSITIVE ASSAY FOR PHOSPHATIDATE PHOSPHO HYDROLASE  
EC-3.1.3.4.

SO ANAL BIOCHEM 87 (1). 1978 19-27. CODEN: ANBCA2 ISSN: 0003-2697

AU BLEASDALE J E; DAVIS C S; HAJRA A K; AGRANOFF B W  
AN 78:239152 BIOSIS

L51 ANSWER 81 OF 89 MEDLINE DUPLICATE 51  
TI Factors controlling the activities of phosphatidate phosphohydrolase  
and phosphatidate cytidyltransferase. The effects of  
chlorpromazine, demethylmipramine, cinchocaine, norfenfluramine,  
mepyramine and magnesium ions.

SO BIOCHEMICAL JOURNAL, (1977 Jan 15) 162 (1) 25-32.  
Journal code: 9YO. ISSN: 0006-2936.

AU Sturton R G; Brindley D N  
AN 77157160 MEDLINE



L51 ANSWER 82 OF 89 HCAPLUS COPYRIGHT 1997 ACS  
 TI Factors controlling the activities of phosphatidate phosphohydrolase and phosphatidate cytidyltransferase. The effects of chlorpromazine, demethylimipramine, cinchocaine, norfenfluramine, mepyramine and magnesium ions  
 SO Biochem. J. (1977), 162(1), 25-32  
 CODEN: BIJOAK  
 AU Sturton, Graham; Brindley, David N.  
 AN 1977:185042 HCAPLUS  
 DN 86:185042

L51 ANSWER 83 OF 89 HCAPLUS COPYRIGHT 1997 ACS  
 TI **Purification** and characterization of **phosphatidate phosphohydrolase** from a soluble fraction of brain  
 SO (1976) 156 pp. Avail.: Xerox Univ. Microfilms, Ann Arbor, Mich., Order No. 77-7898  
 From: Diss. Abstr. Int. B 1977, 37(10), 5032-3  
 AU Davis, Cinda Sue Georgina  
 AN 1977:417918 HCAPLUS  
 DN 87:17918

L51 ANSWER 84 OF 89 SCISEARCH COPYRIGHT 1997 ISI (R)  
 TI **PHOSPHATIDIC-ACID PHOSPHATASE-ACTIVITY**  
 IN **PURIFIED PULMONARY SURFACE-ACTIVE MATERIAL**  
 SO ABSTRACTS OF PAPERS OF THE AMERICAN CHEMICAL SOCIETY, (1976) Vol. 172, pp. 165.  
 AU BENSON B J (Reprint); CLEMENTS J A  
 AN 76:303358 SCISEARCH

L51 ANSWER 85 OF 89 MEDLINE DUPLICATE 52  
 TI Partial **purification** and properties of microsomal **phosphatidate phosphohydrolase** from rat liver.  
 SO BIOCHIMICA ET BIOPHYSICA ACTA, (1975 Nov 21) 409 (2) 201-11.  
 Journal code: AOW. ISSN: 0006-3002.  
 AU Caras I; Shapiro B  
 AN 76062481 MEDLINE

L51 ANSWER 86 OF 89 EMBASE COPYRIGHT 1997 ELSEVIER SCI. B.V.  
 TI Glyceride biosynthesis in swine adipose tissue microsomes.  
 SO COMP.BIOCHEM.PHYSIOL., (1975) 51/2B (171-176).  
 CODEN: CBCPAI  
 AU Raju P.K.; Six D.M.  
 AN 76054403 EMBASE

L51 ANSWER 87 OF 89 MEDLINE  
 TI Metabolism of phospholipids. X. Partial **purification** and properties of a soluble **phosphatidate phosphohydrolase** from rat liver.  
 SO BIOCHIMICA ET BIOPHYSICA ACTA, (1967 Oct 2) 144 (2) 397-408.  
 Journal code: AOW. ISSN: 0006-3002.  
 AU Sedgwick B; Hubscher G  
 AN 68085497 MEDLINE

L51 ANSWER 88 OF 89 HCAPLUS COPYRIGHT 1997 ACS  
 TI Metabolism of phospholipids. X. Partial **purification** and properties of a soluble **phosphatidate phosphohydrolase** from rat liver  
 SO Biochim. Biophys. Acta (1967), 144(4), 397-408  
 CODEN: BBACAQ  
 AU Sedgwick, B.; Huebscher, Georg  
 AN 1967:505415 HCAPLUS  
 DN 67:105415

L51 ANSWER 89 OF 89 HCAPLUS COPYRIGHT 1997 ACS  
TI Role of phosphatidate phosphohydrolase in glyceride biosynthesis  
SO Eur. J. Biochem. (1967), 3(1), 70-7  
CODEN: EJBCAI  
AU Smith, Margaret E.; Sedgwick, B.; Brindley, David N.; Huebscher,  
Georg  
AN 1968:36125 HCAPLUS  
DN 68:36125

=> save temp pap/a l51

ANSWER SET 'L51' HAS BEEN SAVED AS 'PAP/A'

=> d ab 6,7,9,10,12,13,24,28,50,54,60,67,77,78

L51 ANSWER 6 OF 89 MEDLINE DUPLICATE 4  
AB We previously described the **purification** of an 83-kDa  
**phosphatidic acid phosphatase (PAP)** from  
the porcine thymus membranes (Kano, H., Imai, S.-i., Yamada, K. and  
Sakane, F. (1992) J. Biol. Chem. 267, 25309-25314). However, we found  
that a minor 35-kDa protein could account for the PAP activity when  
the purified enzyme preparation was further analyzed. We thus  
determined the N-terminal sequence of the 35-kDa candidate protein  
and prepared antipeptide antibody against the determined sequence,  
MFDKTRLPYVALDVL. The antibody almost completely precipitated the  
purified enzyme activity. Furthermore, the antibody precipitated  
from the radiiodinated enzyme preparation a single 35-kDa protein,  
which was converted to a 29-kDa form when treated with N-glycanase.  
We also found that the immunoprecipitable PAP activity was  
exclusively associated with the plasma membranes of porcine  
thymocytes. These results indicated that the 35-kDa glycosylated  
protein represents the plasma membrane-bound (type 2) PAP. We  
surprisingly noted that the N-terminal sequence of the porcine PAP  
was almost completely conserved in the internal sequence encoded by  
a mouse partial cDNA clone, hic53, reported as a H2O2-inducible gene  
(Egawa, K., Yoshiwara, M., Shibamura, M., and Nose, K. (1995) FEBS  
Lett. 372, 74-77). We thus amplified from the mouse kidney RNA the  
hic53 clone by polymerase chain reaction, and obtained a cDNA  
encoding a novel protein of 283 amino acid residues with a  
calculated Mr of 31,894. Methionine reported as an internal residue  
was found to serve as an initiator, and the C-terminal 64 residues  
were lacking in hic53. The protein contains several putative  
membrane-spanning domains and two N-glycosylation sites. When  
transfected into 293 cells, the cDNA gave more than 10-fold increase  
of the membrane-bound PAP activity, which could be precipitated by  
the antipeptide antibody. In [35S]methionine-labeled cells, the  
translational product was confirmed to be a 35-kDa protein, which  
became 30 kDa in cells treated with tunicamycin, an inhibitor of  
N-glycosylation. We thus succeeded first in identifying the porcine  
type 2 PAP and subsequently in determining the primary structure of  
a mouse homolog of the PAP.

L51 ANSWER 7 OF 89 MEDLINE DUPLICATE 5  
AB A Mg<sup>2+</sup>-independent **phosphatidate phosphohydrolase**  
was **purified** from rat liver plasma membranes in two  
distinct forms, an anionic protein and a cationic protein. Both  
forms of the enzyme dephosphorylated phosphatidate, ceramide  
1-phosphate, lysophosphatidate, and sphingosine 1-phosphate. When  
assayed at a constant molar ratio of lipid to Triton X-100 of 1:500,  
the apparent Km values of the anionic phosphohydrolase for the lipid  
substrates was 3.5, 1.9, 0.4, and 4.0 microM, respectively. The  
relative catalytic efficiency of the enzyme for phosphatidate,  
ceramide 1-phosphate, lysophosphatidate, and sphingosine 1-phosphate  
was 0.16, 0.14, 0.48, and 0.04 liter (min x mg)<sup>-1</sup>, respectively. The  
hydrolysis of phosphatidate was inhibited competitively by ceramide

1-phosphate, lysophosphatidate, and sphingosine 1-phosphate. The  $K_i$ (app) values were 5.5, 5.9, and 4.0  $\mu\text{M}$ , respectively. The hydrolysis of phosphatidate by the phosphohydrolase conformed to a surface dilution kinetic model. It is concluded that the enzyme is a lipid phosphomonoesterase that could modify the balance of phosphatidate, ceramide 1-phosphate, lysophosphatidate, and sphingosine 1-phosphate relative to diacylglycerol, ceramide, monoacylglycerol, and sphingosine, respectively. The enzyme could thus play an important role in regulating cell activation and signal transduction.

L51 ANSWER 9 OF 89 MEDLINE DUPLICATE 7  
 AB Phosphatidate phosphohydrolase (PAP; EC 3.1.3.4) insensitive to N-ethylmaleimide was partially purified from rat liver membranes by a combination of chromatographic methods, immunoabsorption and glycerol gradient centrifugation. The specific activity was increased more than 600-fold over that of the membrane extract. Enzyme antibodies precipitating more than 80% of PAP were obtained and used for the identification of PAP protein on SDS-polyacrylamide gels employing the immunodetection method of Muilerman et al. [(1982) Anal. Biochem. 120, 46-51]. By this approach PAP was localized as a 31 kDa polypeptide.

L51 ANSWER 10 OF 89 MEDLINE DUPLICATE 8  
 AB An N-ethylmaleimide-insensitive **phosphatidate phosphohydrolase**, which also hydrolyzes lysophosphatidate, was **isolated** from the plasma membranes of rat liver. The specific activity of an anionic form of the enzyme (53 kDa,  $pI < 4$ ) was increased 2700-fold. A cationic form of enzyme (51 kDa,  $pI = 9$ ) was purified to homogeneity, but the -fold purification was low because the activity of the highly purified enzyme was unstable. Immunoprecipitating antibodies raised against the homogeneous protein confirmed the identity of the cationic protein as the phosphohydrolase and were used to identify the anionic enzyme. Both forms are integral membrane glycoproteins that were converted to 28-kDa proteins upon treatment with N-glycanase F. Treatment of the anionic form with neuraminidase allowed it to be purified in the same manner as the cationic enzyme and yielded an immunoreactive protein with a molecular mass identical to the cationic protein. Thus, the two ionic forms most likely represent different sialated states of protein. An immunoreactive 51-53-kDa protein was detected in rat liver, heart, kidney, skeletal muscle, testis, and brain. Little immunoreactive 51-53-kDa protein was detected in rat thymus, spleen, adipose, or lung tissue. This work provides the tools for determining the regulation and function of the phosphatidate phosphohydrolase in signal transduction and cell activation.

L51 ANSWER 12 OF 89 HCAPLUS COPYRIGHT 1997 ACS  
 AB Phosphatidic acid phosphohydrolase-2 (PAPH-2), a  $\text{Mg}^{2+}$ -independent, detergent-dependent enzyme involved in cellular signal transduction, is reportedly absent from the plasma membranes of neutrophilic leukocytes, a cell that responds to metabolic stimulation with abundant phospholipase D-dependent diacylglycerol generation. The present study was designed to resolve this discrepancy, focusing on the influence of cellular disruption techniques, detergent availability and cation sensitivity on the apparent distribution of PAPH in human neutrophil subcellular fractions. The results clearly indicate the presence of 2 distinct types of PAPH within the particulate and cytosolic fractions of disrupted cells. Unlike the cytosolic enzyme, the particulate enzyme was not potentiated by  $\text{Mg}^{2+}$  and was strongly detergent dependent. The sol. and particulate enzymes displayed dissimilar pH profiles. Sepn. of neutrophil particulate material into fractions rich in plasma membranes, specific granules, and azurophilic granules by high speed

discontinuous d. gradient centrifugation revealed that the majority of the particulate activity was confined to plasma membranes. This activity was not inhibited by pretreatment with N-ethylmaleimide in concns. as high as 25 mM. PAPH activity recovered in the cytosolic fraction of disrupted neutrophils was almost completely inhibited by 5.0 mM N-ethylmaleimide. The authors conclude that resting neutrophils possess N-ethylmaleimide-resistant PAPH (type 2) within their plasma membranes. This enzyme may markedly influence the kinetics of cell activation by metabolizing 2nd messengers generated as a result of activation of plasma membrane phospholipase D.

L51 ANSWER 13 OF 89 SCISEARCH COPYRIGHT 1997 ISI (R)

L51 ANSWER 24 OF 89 MEDLINE

DUPLICATE 14

AB We purified phosphatidic acid

**phosphatase** (EC 3.1.3.4) 2300-fold from porcine thymus membranes. The enzyme was solubilized with beta-octyl glucoside and Triton X-100 and fractionated with ammonium sulfate. The purification was then achieved by chromatography in the presence of Triton X-100 with Sephacryl S-300, hydroxylapatite, heparin-Sepharose, and Affi-Gel Blue. The final enzyme preparation gave a single band of  $M(r) = 83,000$  on sodium dodecyl sulfate-polyacrylamide gel electrophoresis under reducing and nonreducing conditions. The native enzyme, on the other hand, was eluted at  $M(r) = 218,000$  in gel filtration chromatography with Superose 12 in the presence of Triton X-100. The enzyme was judged to be specific to phosphatidic acid, since excess amounts of dicetylphosphate or lysophosphatidic acid did not inhibit the enzyme activity. In this respect, the enzyme was inhibited by 1,2-diacylglycerol but not by 1- or 2-monoacylglycerol and triacylglycerol. The enzyme required Triton X-100 or deoxycholate for its activity. Although the enzyme appeared to be an integral membrane protein, we could not detect its phospholipid dependencies. The activity was independent of  $Mg^{2+}$ , and other cations were strongly inhibitory. The specific enzyme activity was 15  $\mu\text{mol}/\text{min}/\text{mg}$  of protein when assayed using phosphatidic acid as Triton X-100 mixed micelles. The  $K_m$  for the surface concentration of phosphatidic acid was 0.30 mol%. The enzyme was inhibited by sphingosine and chlorpromazine, and less potently, by propranolol and NaF. The enzyme was insensitive to thio-reactive reagents like N-ethylmaleimide.

L51 ANSWER 28 OF 89 MEDLINE

DUPLICATE 16

AB Phosphatidic acid (PA) is a cytokine in a variety of cell types, and an intermediary in cell activation. It is produced from membrane phospholipids by either lysophosphatidate acyl-CoA:acyltransferase (lyso-PA AT) or phospholipase D. Interleukin-1 (IL-1) stimulation of human mesangial cells (HMC) induced activation of lyso-PA AT, and synthesis of new PA species with significant increase in PA mass. These PA species were enriched in long-chain unsaturated acyl side chains (C18:1, C18:2, C20:5, and C22:6) in both the sn-2 and sn-1 positions, and stimulated the action of the lyso-PA AT as a positive feedback mechanism. Gas-liquid chromatography and mass spectrometry demonstrate that the acyl composition of phosphatidic acid does not resemble that of the major phospholipid fractions of this preparation and therefore is not the product of phospholipase D. The PA species were rapidly converted to 1,2-sn-diacylglycerols by phosphatidate phosphohydrolase, which also was activated by IL-1 via a separate mechanism involving a pertussis-sensitive G-protein. The activities of lyso-PA AT and phosphatidate phosphohydrolase were associated with plasma membrane enriched and refined microsomal fractions. IL-1 stimulation of a murine T cell (thymoma) line, EL-4, also caused stimulation of lyso-PA AT, resulting in PA formation. EL-4 mutants with defective IL-1 receptors did not demonstrate

stimulation of lyso-PA AT, showing the necessity of intact IL-1 receptors for activation of this enzyme. We conclude that PA is a significant signaling intermediary for IL-1 via activation of lyso-PA AT and a G-protein, which activates phosphatidate phosphohydrolase. This system suggests a novel mechanism whereby a low intensity signal may be translated into cellular activation.

- L51 ANSWER 50 OF 89 MEDLINE DUPLICATE 28  
AB In the present studies, we have made several unique observations. First, we have shown that cytosolic phosphatidate phosphohydrolase from adipose tissue subjected to butyl-agarose chromatography was resolved into four different components. These components, designated as passthrough (PT), D150, D250 and E, were present in the proportions of 51:7:24:16, respectively, in the rat adipose cytosol. Comparison of the properties of these components revealed some similar properties, and also several differences. These components showed the same pH optimum, required  $Mg^{2+}$  for activity and were inhibited by N-ethylmaleimide, indicating a requirement of active sulfhydryl groups for activity. These components differed from one another with respect to hydrophobicity, sedimentation behavior, Stokes diameter,  $K_m$  values, thermolability and susceptibility to proteinase treatment. Second, we have shown that each component of this system was associated with lipids which were found to be essential for the catalytic activity. Perturbation of this association by organic solvent or by adding excess amounts of exogenous lipids resulted in the loss of enzyme activity. Finally, we analyzed lipid composition of individual components. These studies suggest that the multi-component system of  $Mg^{2+}$ -dependent phosphatidate phosphohydrolase may be a part of the cytomembrane network.
- L51 ANSWER 54 OF 89 SCISEARCH COPYRIGHT 1997 ISI (R)
- L51 ANSWER 60 OF 89 MEDLINE DUPLICATE 34  
AB Biopsy samples from normal and dystrophic human muscle (Duchenne type) were fractionated by differential centrifugation and microsomes, mitochondria and cytosol were assayed for phosphatidic acid phosphatase (EC 3.1.3.4) and marker enzymes of mitochondria and cytosol. The activity of phosphatidic acid phosphatase was significantly lower in microsomes and higher in cytosol and mitochondria of dystrophic muscle than in the corresponding subcellular fractions of normal muscle. The results support an explanation of earlier findings that there is reduced G3P incorporation into diglycerides and phosphatidylcholine and a qualitative and quantitative change in the amount of phosphatidylcholine in dystrophic microsomes. The possible reasons for the reduction in the activity of only microsomal PA-P-ase were discussed.
- L51 ANSWER 67 OF 89 MEDLINE DUPLICATE 38  
AB According to current concepts, soluble phosphatidic-acid phosphatase, converting phosphatidic acid into a diglyceride, is a rate-limiting enzyme in the hepatic biosynthesis of triglycerides. The present paper is the first report on this enzyme in human liver. The enzyme activity was assayed in ammonium sulphate precipitates of cytosol obtained from human liver biopsies. The activity was stimulated by preincubation with alkaline phosphatase and inhibited by Mg-ATP, suggesting that phosphorylation-dephosphorylation may be of some importance for the expression of the activity of the enzyme. When assayed under optimal conditions, the activity obtained in liver biopsies from normal-weight gallstone patients averaged  $12.8 \pm 2.0$  nmol min<sup>-1</sup> (mg protein)<sup>-1</sup> (mean  $\pm$  SEM) (n = 17). The enzyme activity was slightly higher in liver biopsies from morbidly obese subjects  $16.4 \pm 2.8$  nmol min<sup>-1</sup> (mg protein)<sup>-1</sup> (n = 14). The

difference between the two groups of subjects was probably in part sex-dependent and was not statistically significant. A similar small and insignificant difference between the two groups of subjects was found when the enzyme activity was assayed in the maximally stimulated state--i.e. after incubation with alkaline phosphate. These findings suggest that an increased capacity of the soluble phosphatidic-acid phosphatase is not of major importance for the increased triglyceride synthesis known to occur in obesity. Other factors (i.e. availability of substrate and cofactors) may be of greater importance.

L51 ANSWER 77 OF 89 MEDLINE

DUPLICATE 47

AB In order to evaluate the relationship between the increase in amniotic fluid phosphatidate phosphohydrolase (PAPase) specific activity and the increase in the lecithin/sphingomyelin (L/S) ratio during normal human pregnancy, PAPase specific activity and the L/S ratio were measured in 171 amniotic fluid samples obtained from 164 women who were at 17 to 42 weeks' gestation. The increase in PAPase specific activity in amniotic fluid is parallel to the increase in the L/S ratio. The correlation between PAPase specific activity and the L/S ratio in amniotic fluid from all gestational ages is highly significant. The relationship of PAPase specific activity in amniotic fluid to PAPase specific activity in gastric fluid was investigated in a study of 97 newborn infants. A highly significant correlation was found between these two values. To ascertain if a relationship exists between the specific activity of PAPase in amniotic fluid and the subsequent development of hyaline membrane disease (HMD), 223 neonates who were delivered within 72 hours of amniotic fluid collection were studied. Only one infant developed HMD out of 170 with amniotic fluid PAPase specific activity equal to or greater than 50 nmoles of orthophosphate released X mg.-1 of protein X hr.-1. On the other hand, the finding of an amniotic fluid PAPase specific activity of less than 50 nmoles was of little value in predicting lung immaturity. We believe that these findings are also supportive of the view that PAPase and surfactant are released from the type II pneumocyte as a closely related structural unit, viz., the lamellar body.

L51 ANSWER 78 OF 89 MEDLINE

DUPLICATE 48

AB Phosphatidate phosphohydrolase (EC 3.1.3.4) activity can be found in late gestational human amniotic fluid and is thought to originate in type II alveolar cells of the fetal lungs where it plays an important role in lung surfactant synthesis. In the present study, phosphatidate phosphohydrolase activity was detected and characterized in a 105 000 X g pellet of amniotic fluid using either [32P]phosphatidate or a water-soluble analog, 1-O-hexadecyl-rac-[2-(3)H]glycerol 3-phosphate as substrate. With either substrate, enzyme activity was optimal at pH 6.0. The soluble analog was hydrolyzed with a Km value of 163 micrometer and a V of 30 nmole/min per mg of protein, and offered several advantages over phosphatidate as a substrate for assaying phosphatidate phosphohydrolase in amniotic fluid. Using the synthetic analog, phosphatidate phosphohydrolase activity was measured in the 700 X g supernatant fraction of 30 human amniocentesis samples and compared with another index of fetal lung maturity, the phosphatidylcholine/sphingomyelin ratio. The results suggest that the new phosphohydrolase assay may be clinically useful in the assessment of fetal lung development.

=> log y

COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
11.95	12.21

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE	TOTAL
------------	-------

CA SUBSCRIBER PRICE

ENTRY  
-0.48

SESSION  
-0.48

STN INTERNATIONAL LOGOFF AT 10:37:17 ON 04 NOV 1997

Host Name: +++  
OK  
ATHZ  
OK

FILE 'USPAT' ENTERED AT 08:12:36 ON 04 NOV 1997

```

* * * * *
*           W E L C O M E   T O   T H E           *
*           U . S .   P A T E N T   T E X T   F I L E           *
* * * * *

```

=> s phosphatidic acid phosphatase# or phosphatidate phosphohydrolase#  
790 PHOSPHATIDIC  
412521 ACID  
8173 PHOSPHATASE#  
2 PHOSPHATIDIC ACID PHOSPHATASE#  
(PHOSPHATIDIC(W)ACID(W) PHOSPHATASE#)  
28 PHOSPHATIDATE  
91 PHOSPHOHYDROLASE#  
10 PHOSPHATIDATE PHOSPHOHYDROLASE#  
(PHOSPHATIDATE(W) PHOSPHOHYDROLASE#)  
L1 12 PHOSPHATIDIC ACID PHOSPHATASE# OR PHOSPHATIDATE PHOSPHOHYDR  
OLA  
SE#

=> s l1(10a)(human or isolat? or purif? or gene/q)  
153676 HUMAN  
290942 ISOLAT?  
160779 PURIF?  
L2 4 L1(10A)(HUMAN OR ISOLAT? OR PURIF? OR GENE/Q)

=> d cit,ab,kwic 1-

1. 5,670,506, Sep. 23, 1997, Halogen, isothiocyanate or azide  
substituted xanthines; Alistair Leigh, et al., 514/258, 263; 544/267,  
272, 277 [IMAGE AVAILABLE]

US PAT NO: 5,670,506 [IMAGE AVAILABLE] L2: 1 of 4

#### ABSTRACT:

There is disclosed a compound having the formula: ##STR1## wherein n is an integer from 5 to 9, wherein the core moiety is a heterocyclic moiety wherein C.sub.a, C.sub.b, and C.sub.c are an R or S enantiomer or racemic mixture and the C.sub.a, C.sub.b, and C.sub.c carbon atoms are bonded together by a single bond, double bond, ether or ester linkages, wherein R.sub.1, R.sub.2 and R.sub.3 are independently halo, hydroxy, hydrogen, keto, isothiocyano, azide or haloacetoxy with the proviso that at least one of R.sub.1, R.sub.2 or R.sub.3 must be a halo, isothiocyano, azide or haloacetoxy group, wherein R.sub.4 is hydrogen, C.sub.1-6 alkyl, C.sub.1-6 alkenyl, cyclo C.sub.4-6 alkyl, or phenyl, and wherein halo refers to fluoro, chloro, bromo and iodo and salts thereof and pharmaceutical compositions thereof.

DETDESC:

DETD(49)

IL-1 activates (through the Type I IL-1 receptor) a lyso-PA acyltransferase (LPAAT) and \*\*phosphatidate\*\* \*\*phosphohydrolase\*\* within 5 seconds of cell (for example, \*\*human\*\* mesangial cells, HMC) exposure to this cytokine. Activation of both enzymes results in production of PA species with sn-1 and.

2. 5,641,783, Jun. 24, 1997, Substituted amino alcohol compounds; J. Peter Klein, et al., 514/263, 183, 222.5, 223.5, 224.2, 226.8, 227.5, 228.8, 229.2, 230.5, 230.8, 237.8, 241, 242, 243, 246, 247, 248, 249, 255, 256, 258, 259, 261, 262, 270, 274, 297, 300, 301, 302, 303, 306,



307, 311, 312, 315, 345, 351, 357, 359, 360, 361, 362, 363, 364, 365,  
367, 369, 372, 373, 374, 375, 376, 378, 379, 380, 381, 383, 389, 394,  
395, 398, 399, 401, 404, 406, 413, 415, 416, 418, 423, 424, 425, 427,  
428; 544/1, 2, 3, 8, 53, 63, 65, 66, 67, 90, 91, 162, 215, 216, 219, 220,  
224, 235, 239, 254, 255, 257, 262, 272 [IMAGE AVAILABLE]

US PAT NO: 5,641,783 [IMAGE AVAILABLE]

L2: 2 of 4

ABSTRACT:

Disclosed are compounds having a straight or branched aliphatic hydrocarbon structure of formula I: ##STR1## In formula I, n is an integer from one to four and m is an integer from four to twenty. Independently, R.sub.1 and R.sub.2 are hydrogen, a straight or branched chain alkyl, alkenyl or alkynyl of up to twenty carbon atoms in length or --(CH.sub.2).sub.w R.sub.5. If R.sub.1 or R.sub.2 is --(CH.sub.2).sub.w R.sub.5, w may be an integer from one to twenty and R.sub.5 may be an hydroxyl, halo, C.sub.1-8 alkoxyl group or a substituted or unsubstituted carbocycle or heterocycle. Alternatively, R.sub.1 and R.sub.2 may jointly form a substituted or unsubstituted, saturated or unsaturated heterocycle having from four to eight carbon atoms, N being a hetero atom of the resulting heterocycle. R.sub.3 may be either hydrogen or C.sub.1-3. In the compounds, a total sum of carbon atoms comprising R.sub.1 or R.sub.2, (CH.sub.2).sub.n and (CH.sub.2).sub.m does not exceed forty. R.sub.4 is a terminal moiety comprising a substituted or unsubstituted, oxidized or reduced ring system, the ring system having a single ring or two to three fused rings, a ring comprising from three to seven ring atoms. The disclosed compounds are effective agents to inhibit undesirable responses to cell stimuli.

DETDISC:

DETD(2)

The . . . behavior by a particular phase of a secondary messenger pathway system (Bursten et al., "Interleukin-1 Rapidly Stimulates Lysophosphatidate Acyltransferase and \*\*Phosphatidate\*\* \*\*Phosphohydrolase\*\* Activities in \*\*Human\*\* Mesangial Cells," J. Biol. Chem., Vol. 266, No. 31, pages 20732-20743, Nov. 5, 1991). The second messengers are lipids or. . .

3. 5,521,315, May 28, 1996, Olefin substituted long chain compounds; Gail Underiner, et al., 546/243; 544/285; 546/242 [IMAGE AVAILABLE]

US PAT NO: 5,521,315 [IMAGE AVAILABLE]

L2: 3 of 4

ABSTRACT:

There is disclosed an olefin-substituted compound having the formula:

R--(core moiety),  
wherein R is a straight chain hydrocarbon having at least one double bond and a carbon chain length of from about 6 to about 18 carbon atoms, wherein multiple double bonds are separated from each other by at least three carbon atoms, wherein the closest double bond to the core moiety is at least five carbon atoms from the core moiety, and wherein the hydrocarbon chain may be substituted by a hydroxyl, halo, keto or dimethylanimo group and/or interrupted by an oxygen atom and salts thereof and pharmaceutical compositions thereof.

DETDISC:

DETD(39)

IL-1 activates (through the Type I IL-1 receptor) a lyso-PA acyltransferase (LPAAT) and \*\*phosphatidate\*\* \*\*phosphohydrolase\*\* within

5 seconds of cell (for example, \*\*human\*\* mesangial cells, HMC) exposure to this cytokine. Activation of both enzymes results in production of PA species with sn-1 and. . .

4. 5,470,878, Nov. 28, 1995, Cell signaling inhibitors; John Michnick, et al., 514/558, 258, 262, 274, 299, 315, 418, 425, 529, 552, 561, 613, 617, 626, 629, 669; 544/254, 285, 301; 546/183, 243; 548/486, 556 [IMAGE AVAILABLE]

US PAT NO: 5,470,878 [IMAGE AVAILABLE]

L2: 4 of 4

#### ABSTRACT:

Therapeutic compounds have the formula:

(X)<sub>j</sub>-(non-cyclic core moiety),  
j being an integer from one to three, the core moiety is non-cyclic and X is a racemic mixture, R or S enantiomer, solvate, hydrate, or salt of:  
##STR1## \*C is a chiral carbon atom, n is an integer from one to four (preferably from one to three), one or more carbon atoms of (CH.sub.2).sub.n may be substituted by a keto or hydroxy group, and m is an integer from one to fourteen. Independently, R.sub.1 and R.sub.2 may be a hydrogen, a straight or branched chain alkane or alkene of up to twelve carbon atoms in length, or --(CH.sub.2).sub.w R.sub.5, w being an integer from two to fourteen and R.sub.5 being a mono-, di- or tri-substituted or unsubstituted aryl group, substituents on R.sub.5 being hydroxy, chloro, fluoro, bromo, or C.sub.1-6 alkoxy. Or jointly, R.sub.1 and R.sub.2 form a substituted or unsubstituted, saturated or unsaturated heterocyclic group having from four to eight carbon atoms, N being a hetero atom. R.sub.3 is a hydrogen or C.sub.1-3. Or, therapeutic compounds may also have the formula: ##STR2## R.sub.4 is a hydrogen, a straight or branched chain alkane or alkene of up to eight carbon atoms in length, --(CH.sub.2).sub.w R.sub.5, w being an integer from two to fourteen and R.sub.5 being a mono-, di- or tri-substituted or unsubstituted aryl group, substituents on R.sub.5 being hydroxy, chloro, fluoro, bromo, or C.sub.1-6 alkoxy, or a substituted or unsubstituted, saturated or unsaturated heterocyclic group having from four to eight carbon atoms. r and s are independently integers from one to four, the sum (r+s) not being greater than five. t is an integer from one to fourteen and one or more carbon atoms of (CH.sub.2).sub.s or (CH.sub.2).sub.t may be substituted by a keto or hydroxy group.

DETDDESC:

DETD(40)

IL-1 activates (through the Type I IL-1 receptor) a lyso-PA acyltransferase (LPAAT) and \*\*phosphatidate\*\* \*\*phosphohydrolase\*\* within 5 seconds of cell (for example, \*\*human\*\* mesangial cells, HMC) exposure to this cytokine. Activation of both enzymes results in production of PA species with sn-1 and. . .

=> log y

U.S. Patent & Trademark Office LOGOFF AT 08:47:48 ON 04 NOV 1997

+++  
OK  
ATHZ  
OK